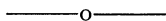


stripe; underside of the body bluish green in the yellow green larvæ. Caudal horn pink, with a yellowish end terminated by a black tip. The seven sphingial bands bright yellow and rather broad on the yellow-green larvæ, whitish on the blue-green "worms." Spiracles brick-red with a surrounding ring of pale red. The bands are shaded above by dark green and also by an oblong, triangular pink patch on the yellow-green specimens; eight creases to each body ring. Some of the larvæ began to burrow on the day of capture, and pupated in five or six days. The burrow is several inches in depth.

#### **Hemaris diffinis.**

I have collected the larvæ of this species on feverwort in June, and later in the Summer on buckberry and snowberry. The mature "worm" is nearly two inches long; side of body light yellowish green with yellow granules; top of the body bluish green with white granules; underside of the body dirty brown. Top of second segment set with strong tooth-like yellow granules surrounding the head not unlike a yellow collar. Head blue-green; feet banded with black and dirty white. Spiracles black, set in an oval bluish spot with a white dot above and below (the spiracle). Caudal horn slender, almost straight, black and heavily granular, yellow at the side of the base. Young larva whitish, with black horn and a very distinct yellow "collar." Larva does not burrow, but spins a thin cocoon inside of leaves. Pupa almost black.



## **ON A COLLECTION OF NEUROPTEROID INSECTS FROM KANSAS.**

By NATHAN BANKS.

Mr. W. A. Snow, of the University of Kansas, has kindly sent me for determination the collection of these insects in that institution. Although the collection is small, yet it adds materially to our knowledge of the distribution of these interesting insects, as hardly any species were previously known from the State.

#### **PERLIDÆ.**

*Pteronarcys nobilis* Hag., 1 ♂.—

This differs somewhat from Hagen's description of his New York specimen, but resembles more his

Tennessee specimen. The basal border of the antennæ is narrow and without a process above. The angles of the prothorax sharp, the

sides slightly concave; the knees are black; the venter orange in the middle; veins of wings somewhat clouded, especially near base; the ninth ventral segment black, except tip, which is yellowish, deeply notched; the appendages of the last dorsal segment are brown and their superior margins slightly concave. Length 27 mm.

*Acroneuria* sp., 1 ♀.—Estes Park, Col. Probably a form of the common *abnormis*.

*Pseudoperla occipitalis* Pict., 1 ♀.

*Perla lurida* Hag., 2 ♀, 1 ♂.—The appendages of the last dorsal segment of the ♂ are slender, narrowed at the tip and sharp pointed.

*Perla zanthenes* Newm., 1 ♀, 1 ♂.

—The ♂ appendages are much broader and more blunt than in *lurida*.

*Perla ephyre* Newm., 1 ♀, 1 ♂?—

The ♂ may be another species.

*Capnia* sp., 1 specimen.

### EPHEMERIDÆ.

*Polymitarcys albus* Say?—One subimago, probably this species.

*Hexagenia bilineata* Say, 3 spec.

*Hexagenia venusta* Eat., 2 spec.

*Pentagenia 4-punctata* Walsh, 1 subimago.

*Leptophlebia* sp., 2 specimens.

*Siphururus* sp., 2 specimens.

*Siphururus aridus* Walk.?—A subimago, perhaps this species.

*Heptagenia pulchella* Walsh, 2 sp.

*Heptagenia* sp., 1 specimen.

*Cænis diminuta* Walk., 3 specimens

### ODONATA.

*Calopteryx maculata* Beauv., 1 ♀.

*Heterina americana* Fab., 1 ♂.

*Heterina basalis* Hag., 1 ♂.

*Lestes forcipata* Ramb., 1 ♀.

*Argia apicalis* Say, 2 ♀, 1 ♂.

*Ischnura verticalis* Say, 4 spec.

*Enallagma civile* Hag., 1 ♂.—Manitou Park, Col.

*Enallagma prævara* Hag., 1 ♂.

*Enallagma signata* Hag., 1 ♂.

*Enallagma* sp., 1 ♀.—Thorax villos, moderately large, prothorax with a pale spot each side, postocular spots confluent, abdomen as in *E. signata*, but a small median black spot on segment 10, it is also a little shorter than in that species, pterostigma very short, almost white, as are also the costal veins.

*Herpetogomphus designatus* Selys, 1 ♂.

*Cphiogomphus severus* Hag., 1 ♀.

—Manitou Park, Col.

*Gomphus externalis* Selys, 1 ♂.

*Gomphus amnicola* Walsh, 1 ♂.

*Anax junius* Drury, 1 ♀.

*Macromia teniolata* Ramb., 1 ♂.

*Epithea obsoleta* Say, 1 ♀.

*Pantala hymenæa* Say, 1 ♂, 2 ♀.

*Perithemis domitia* Drury, 1 ♂, 2 ♀.

*Libellula trimaculata* DeGeer, 1 ♀.

*Libellula basalis* Say, 1 ♂.

*Mesothemis simplicicollis* Say, 3 ♂.

*Mesothemis longipennis* Burm., 1 ♀.

*Diplax rubicunda* Say, 1 ♀.

*Diplax costifera* Hag., 1 ♀.

*Diplax decisa* Hag., 1 ♀.—Agrees with Hagen's description, except that the wings are flavescent to the nodus.

*Diplax corrupta* Hag., 1 ♂, 1 ♀.

**NEUROPTERA.**

- Raphidia oblita* Hag., 2 specimens. *Bittacus stigmaterus* Say, 2 spec.  
 Colorado. *Brachynemurus abdominalis* Say,  
*Hemerobius* sp., 1 specimen. 1 specimen.  
*Polystæchotes punctatus* Say, 1 sp. *Brachynemurus* sp., 2 specimens.  
*Chrysopa nigricornis* Burm., 1 sp. Colorado.  
*Chrysopa florabunda* Fitch, 1 spec. *Ulula hyalina* Latr., 1 specimen.  
*Bittacus strigosus* Hag., 2 spec.

**TRICHOPTERA.**

- Setodes urowarii* Kol., 1 specimen. white; anterior wings black, with  
*Setodes albida* Walk., 2 specimens. many small white spots, most  
*Setodes incerta* Walk.?, 1 specimen. numerous near tip; posterior  
 —Has the palpi shorter and more wings fusco-hyaline, cilia black.  
 hairy than other specimens which Spurs 1.2.2. Length ♀ 8.5 mm.  
 I have seen and may be different. One ♀ and one ♂, Douglas Co.,  
*Leptocerus dilutus* Hag., 3 spec. Kans., August, electric light. A  
*Mystacides punctata* nov. sp.— larger specimen has a greenish  
 Black, with white spots. Palpi abdomen, the tarsi spotted with  
 black with black hair, second black, part of the basal joint of  
 joint short, third much longer, antennæ and the face white; it  
 fourth a little shorter than the may be different, but is badly  
 third, fifth long and flexible, rubbed.  
 tapering. Antennæ black, basal *Hydropsyche scalaris* Hag., 2 spec.  
 third annulate with snow white, *Hydropsyche* sp., 2 specimens.  
 basal joint black, with a white *Hydropsyche phalerata* Hag., 8 sp.  
 line on inner side; thorax and ab- —There may be two or more  
 domen black; legs fuscous, tarsi species in this.

All the specimens are from Douglas County, Kansas, unless otherwise marked.

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Mrs. SLOSSON has sent me a very interesting species as a result of her stay in Florida this Winter. *Thecla acis* was described by Drury in 1773. The species has remained exceedingly rare in collections in this country, and is wanting in a number of the largest. The locality given by Drury is New York, which is evidently an error. *Acis* is a West Indian species, and its geographical range is probably not accurately known. Mrs. Slosson says in regard to it: "I had grown tired of collecting *Theclas* and finding them all *pæas*, and was surprised to find these two strangers (*acis*) in the net. They were fluttering with the others about blossoms and leaves in the hot sunshine on a path through the low scrub quite near the ocean beach at Lake Worth." There is a good description of the species in French's "Butterflies of the Eastern United States.—HENRY SKINNER.